U.S. Fish & Wildlife Service – Region 2
Southwest Region Fisheries Program

"Big River Fish" Recovery
Arizona Fishery Resources Office

Issue:


USFS

Endangered bonytail.

The "big river fishes" of the Colorado River include humpback chub, bonytail, razorback sucker, and Colorado pikeminnow; they are a suite of species specially adapted to life in the Colorado River. Major alterations to the river, more specifically construction of dams, and predation and competition by introduced non-native fishes, have caused species that were once abundant throughout the Colorado River to become listed as endangered. Bonytail have essentially become extirpated from the wild, with the only broodstock being held in captivity at Dexter National Fish Hatchery and Technology Center. Razorback sucker populations have steadily declined from over 50,000 fish a decade ago to less than 5,000 fish today. The largest remaining population of humpback chub in the Colorado River occurs in the Little Colorado River, a tributary used for spawning. Fortunately, the current population of humpback chub in the Little Colorado River is self-sustaining. Unfortunately, the population has been declining for decades. Colorado pikeminnow are extirpated from the Colorado River in the lower basin, however, small populations currently exist in smaller rivers in Arizona through stocking efforts by the Arizona Game and Fish Department. Because of the current status of big river fishes, there is an urgent need for intensive efforts to maintain existing populations and ultimately recover them.

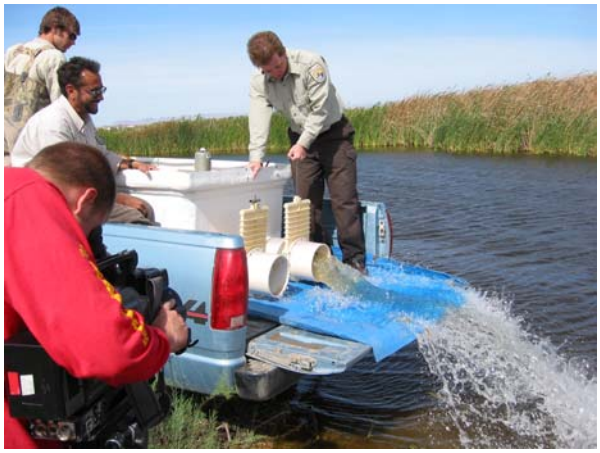
Accomplishments:


USFWS

Hoopnets are used to monitor humpback chub populations in the blue water of the Little Colorado River.

In FY 2003, the Arizona Fishery Resources Office (AZFRO) continued recovery efforts for big river fishes by translocating juvenile humpback chub into unoccupied areas of the Little Colorado River in hopes of increasing humpback chub recruitment to adulthood by allowing translocated fish to take advantage of abundant food resources, warm water temperatures, and reduced competition and predation by the fewer large-bodied non-native fish in this area. In addition, AZFRO completed annual stock assessment and monitoring trips of humpback chub populations in the Little Colorado River, began a study to determine the effects of repeated handling on humpback chub, and completed a study that explored the feasibility of augmenting humpback chub populations within the Colorado River, Grand Canyon. Along the Lower Colorado River, AZFRO completed annual "round-up" efforts of razorback sucker and bonytail as part of an ongoing multi-agency effort to collect broodstock and monitor populations, renovated backwater habitats to improve conditions for razorback sucker and bonytail, and reintroduced fingerling razorback sucker into newly created backwater habitats. Lastly, AZFRO led an inter-agency, *Recovery Implementation Plan/Scientific Work Group* in drafting a management plan for the big-river fish of the lower Colorado River Basin.

Future Outlook:


USFWS

Razorback suckers are released into newly created backwater habitat.

Strategies needed to recover and manage big river fishes in the Lower Colorado River Basin include maintaining genetic refugia for razorback sucker and bonytail and establishing self-sustaining populations of these species, increasing current humpback chub population size, at a minimum maintain current size, and maintaining an experimental nonessential population of Colorado pikeminnow. These strategies can be accomplished by utilizing hatcheries to produce larger fish for reintroduction, using natural or constructed habitats to develop self-sustaining populations and to produce larger fish for mainstem habitats, and exploiting habitats made available by reservoir drawdown or drying to establish populations of large adults.

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